53: Tokarev and Gurvich E-4 (no date) 1964
RV2 Yakut RV2

During the first two years of the Soviet regime the situation hardly changed for the better. There was redistribution of the land in 1923-24, but the reform only partly cut down the amount of land used by the toyons and virtually made no difference to the burdensome state of the poor people. For example, the nonrepartitional land expropriated by the toyons on the basis of their "clearing right" was left in their possession. It was only the second land reform of 1929 that put an end to toyon coercion and created a situation in which the agriculture of Yakutiya could be improved. About 150,000 hectares of the best land, formerly owned by the toyons and kulaks, then passed into the hands of the working peasantry. 423 565

A collective-farm movement among the Yakut workers began in about 1930. In 1929 only 3.6 percent of the households were collectivized; by 1932 the figure was 41.7 percent, and by 1947 collective farms united 98.7 percent of all the households in the Yakut Republic. Collectivization gave a powerful impetus to the development of land cultivation, which prior to the Revolution had only advanced at a snail's pace. The sown area in Yakutiya had increased to 92,000 hectares by 1946, as opposed to 37,000 in 1917. Machine-tractor stations provide great assistance to the collective farms. Several hundred tractors, many combines and trucks are now at work in the fields. More than 20,000 agricultural machines are in operation. Trained teams of Yakut tractor-drivers, combine-operators, drivers and mechanics have begun to appear. Great advances have been made in the field of agricultural techniques. Particular attention has been given to retention of the moisture in the soil. The climate and soil conditions of Yakutiya make agriculture particularly difficult. In addition to the frequent droughts and spring frosts, some of the lakes dry up and deprive whole settlements of water. Over the last few years the Yakut collective farms have worked very hard to organize irrigation and flooding. 474 241 242

Many farms use water wheels and pumps to water their gardens. In 1952, more than 300,000 hectares of land, chiefly green meadows and pastureland, were irrigated by means of both permanent and temporary installations. The first specialized meadow-reclamation station had been set up in the Gorniy Rayon.

In 1952, M. G. Yegorov, member of the New Life collective farm in the Megino-Kangalasskiy Rayon, was awarded a Stalin Prize for the introduction of more modern methods in vegetable-growing on Yakutiyan collective farms. In the rigorous Yakutiyan climate Yegorov had been gathering 300-350 tsentners of cabbage, 180-190 tsentners of cucumbers, 170 tsentners of carrots, and 130 tsentners of tomatoes each year per hectare. In 1956 he was awarded the Order of Lenin.

Nevertheless, animal husbandry is still the chief branch of agriculture in Yakutiya. Poorly productive livestock was a legacy received by the collective farms from the past. The milk yield per cow averaged only 600 kilograms of milk per year. The Yakut farmers struggled hard for complete reorganization of their animal husbandry. The productivity of the cattle was improved throughout the Republic by crossbreeding. Techniques for the maintenance and pasturing of cattle were radically changed. Many standardized cattle-yards of an improved design were built. The work of the milkmaid was mechanized on many collective farms. On account of the extensive clearing of meadowland, the farms are in a position at the present time to provide their cattle with coarse fodder, although they still do not have enough concentrates. 233

An important part has been played in the development of animal husbandry by veterinary-zootechnical work. The rate of malignant anthrax among cattle has been reduced to nil. Precautionary measures in this 232

field have been of tremendous benefit. Many hundreds of specialists are now at work in the field of agriculture and among them there are quite a few veterinary surgeons and technicians with higher education. Horse-breeding is also being successfully developed.

The income received by collective-farm members is an indication of the considerable progress made in the collective-farm system. For example, in 1955 the Yershov family from the Red Partisan collective farm in the Churapchinskiy Rayon, consisting of four members, completed 22,500 labor units[1] and in the final accounting received 100 poods of grain, 48 poods of meat, 69 poods of oil, more than 30 poods of vegetables, 2 foals and more than 5500 rubles in cash.

For each labor unit completed at the Red Star collective farm in the Aldanskiy Rayon in 1955 the farmer received a payment of 32 rubles and 50 kopeks.

High incomes are also received by cattle breeders in the northern regions. On the Victory collective farm in the Olenekskiy Rayon, 808,000 rubles were spent in payment for labor units in 1954. For each labor unit the payment was 16 rubles in cash and 210 grams of meat; each household received an average income in cash of 11,400 rubles.

Trapping, Fur-Farming and Fishing

There are 22 species of fur-bearing animals in the Yakut ASSR. Trapping is one of the main occupations of the population of northern Yakutiya. On account of the indiscriminate extermination of the reserves of fur in Yakutiya many species of animals such as the otter, sable, and dark-brown fox had almost entirely disappeared by 1917. The Revolution put an end to the extermination of these fur-bearing animals. It also did away with the centuries-old enslavement of the hunting and trapping population in debts by commercial capital. One of the first steps taken by the Soviet authorities was to annul the debts to merchants on the part of the hunters and to prohibit the private buying up and resale of furs. Hunting seasons were introduced and the hunting of declining species of fur-bearing animals was prohibited or restricted. The reconstruction of hunting led to Yakutiya's becoming one of the chief suppliers of furs. Over the last few years the Republic has provided 20-25 percent of the All-Union output of furs. An important part in development of planned hunting has been played by the hunting-trapping stations (POS) set up from 1931 to 1933. These stations instructed hunters and trappers in new techniques of hunting and fitted them out with the necessary equipment. The chief hunting weapon is the small-caliber rifle and carbine. Use is made of imported traps and local self-trapping devices. Use is made of improved self-operating devices which prevent the pelts' being damaged, for example, the "trough-fall." The collective farms equip hunters with means of transportation, tents, stoves, and ammunition. The weapons are usually the hunters' personal property. The advanced trappers in the polar-fox regions have at their disposal 200-300 traps each and 100-150 springtraps of improved design. Many squirrel-hunters have from 400 to 500 fall-snares. During the

[1] The labor unit (trudoden') is the standard of unit of payment on collective farms. It is set at a fixed rate in cash and produce for each farm but may vary from year to year. Different jobs are rated differently as to number of labor units for an actual day's work.—Ed.

trapping season brigades of hunters are equipped with food and ammunition while actually in the field. Traveling agents from the Rural Consumers' Society take the hunters everything they need in the hunting grounds and collect the pelts from them on the spot.

Over the last 20 years a great deal of work has been done to supplement the animals hunted and trapped in the Yakut ASSR. Between 1930 and 1932, 118 specimens of the muskrat, a valuable animal, were brought into the Tokkinskiy Rayon of Yakutiya. It is now found in 32 rayons and has even become acclimatized beyond the Arctic Circle. Over the last few years muskrat shooting has been begun on a systematic basis.

Steps have been taken to replace the reserve of sable. At the present time more than 600 Barguzina sables have been let loose in the forests of Yakutiya. In many parts of the tundra the polar fox is supplied with additional fodder. In the summer, trappers and trapping industry experts carry out careful observation of the conifer harvest and the migration of fur-bearing animals so as to be able to give collective farms an indication of which particular type of hunting they should engage in. The farms make certain that their traps are closed for the summer to prevent needless loss of animals.

In Yakutiya there is also hunting for wild reindeer, elk, wildfowl and waterfowl as a source of food. Hunting is the most profitable commercial branch of the economy in the northern regions. From year to year the material standard of the collective-farm members is increasing, and the high income received from hunting and trapping enables the farmers of the North to supply themselves with food, factory-made clothing and footwear, and, in addition, to acquire commodities of everyday and personal use. Women hunters and trappers have begun appearing in Yakutiya, which is an innovation.

At the present time furs are not only obtained by trapping. Within the Yakut socialist economy, just as in the other regions of the Soviet North, a new branch of economy has sprung up—the breeding of fur-bearing animals in captivity (and, clearly, the most valuable ones). This experiment was begun in the Republic in 1936. Silver-fox farms were set up in Kitcha and Pokrovskoye. In 1956 there were 8 cooperative and 167 collective fur-farms specializing in silver fox in Yakutiya. Hundreds of pedigreed forest animals are kept on the cooperative farms.

The Yakut fish industry began to develop in the 1920's. The Tusbalyk ("salt fish" in the Yakut language) Trust was set up in 1928. During World War II the Yakutgosrybtrest (Yakut State Fish Trust) was set up, combining all the fisheries. Seines, 500-700 meters long, hauled by tractors, appeared at the fisheries. Around-the-year fishing was organized on the lower reaches of the Lena and Yana. A large quantity of fish is procured by the population for personal use. The northern fisheries supplement their equipment during the year by acquiring new seines and barrels and add new ships to their fleets. At the mass-scale fisheries the needs of the workers are provided for by cultural stations. The income of the collective fishermen is increasing. Although local methods of fishing (by boat, by barricading rivers, etc.) are still used, they are becoming more and more amateur methods and are being replaced by modern mechanized techniques.

Collective Farms

Typical examples of the Yakut collective farm are the enlarged Stalin collective farm in the Ordzhonikidzevskiy Rayon of the Kachikatskiy Nasleg

and the Stalin farm in the Megino-Kangalasskiy Rayon. The first of these barely numbered 10 households in the 30's when first organized, but now unites 265 individual households. This collective farm has many different branches. It has 1200 hectares of ploughland, 3000 hectares of meadowland, 2700 hectares of pastureland, and upward of 3000 head of livestock. The collective farm has seven subsidiary farms for dairy-farming, horse-breeding, reindeer-breeding, poultry and pigs. Since 1953, fox and rabbit have been reared on it. The farm has two power stations. The electricity is used for purposes of illumination, threshing and cleaning the seed, grinding grain and sawing wood. An electric milking system for the cows is being introduced.

Well-designed houses, schools and hospitals have been constructed in the collective-farm settlement. It has its own club, library and radio-relay station. A park has been made near the settlement, and there is also a stadium. Films are shown regularly and amateur concerts are often organized.

The Stalin collective farm in the Megino-Kangalasskiy Rayon became the largest collective farm in the Republic as soon as the neighboring collectives merged with it. By government decree, it is the possessor of 67,000 hectares of land, of which 2798 hectares are ploughland, and almost 11,000 constitute meadowland and pastures. The remaining land is taken up by forests. The collective farm sows almost 800 hectares of wheat, 720 hectares of spring and winter rye, more than 250 hectares of oats and bareley, and 55 hectares of vegetables and potatoes. In 1955 there were about 3500 head of cattle on the farm, more than 1200 horses, 250 reindeer, and more than 100 pigs; furthermore, the collective farm has a subsidiary poultry farm and a section for breeding fur-bearing animals.

At the present time the collective farm has three small power stations with a total output of 125 kilowatts. The electricity is used for threshing grain, driving a sawmill and operating lathes. In view of the increased generation of electricity the farm has mechanized the delivery of fodder to the byres. There are more than 500 different types of machines, 6 trucks, 2 passenger cars and 12 engines on the farm.

In 1955, the farm's income was 2,700,000 rubles. The material status of the farmers has been considerably improved.

At the same time their cultural standards have increased.

There is not one single illiterate person on the farm: 120 farmers have a secondary education or higher, 10 of them are studying at universities and 165 in tekhnikums and secondary schools. Many of the collective-farm members return to their own farms after receiving their education.

Great progress has been attained by the northern farms of the Nizhne-Kolymskiy, Bulunskiy, Olenekskiy, Anabarskiy and other rayons. Their achievements are due to the overall reorganization of reindeer-breeding and the trapping industry. On many of the farms there are Yakuts, Evenks, Chukchi and other minorities all working together.

Socialization of the reindeer and the creation of large herds has made it possible to introduce such veterinary measures as stage-by-stage nomadizing based on the rotation of pastureland, inoculations, and day and night guarding of the herds. In the past Yakutiyan reindeer-herders never made use of dogs, which, for example, among the Nentsy make the work of the herdsmen easier. Nowadays reindeer-herding dogs are used extensively in the Nizhne-Kolymskiy, Allaikhovskiy and Bulunskiy Rayons.

The northern collective farms have not confined themselves to the traditional branches of economy, namely, reindeer-breeding, hunting and fishing, and are courageously developing new branches. On most of the

233 reindeer is his tall branching horns. Forked horns appear on calves already by the end of the first year, and they develop completely during the second year. The horns drop off every year in the spring and grow out again by autumn. The horns of male reindeer fall off during the last days of October, after the driving season. The horns of castrated males and of cows without calves fall off in March or April; those of cows with calves fall off on the fifth day after they have calved; the horns of emaciated or sick reindeer fall off in August, or else they remain on throughout the course of a whole year covered with skin. The natives saw off the horns of such reindeer right at the base in the springtime, since they say that everything the reindeer eats "goes to the horns" and that it does not get fat for this reason. On emaciated reindeer the horns are usually flaccid (emek) and soft; the horns of fat reindeer are firm, tall, and
232 branchy, especially those of males. Commencing in May--on
233 "George's Day" (May 6)--the Dolgan reindeer begin to grow new
262 horns. At first they are soft, and covered with a delicate, hairy skin; by July they grow firm (ossify). Up until this time the delicat radicles of the horns (tuora) often break off, and when this happens the natives tie off the horn at a place below the break with a string so that there will not be any hemorrhage, and so that rain water wil not fall on that place and make the brain of the reindeer "rot"; they place moss on the wound or pour salt on it. The horns of calves are especially weak, and if they are not handled carefully enough the top of the skull (eelde) is sometimes torn off along with the horns. The short radicles of the summer horns before they ossify are considered a delicacy; the natives cut them off with a knife from the horns of living reindeer and eat the thin skin raw, singeing off the hair beforehand.

233 [203] In the autumn before the first snow the castrated bucks, the cows--starting on the "Day of Assumption [of the Holy Mother of God]" (August 28)--and the bulls begin to rub off the thin skin of their horns against trees and stones; this is accompanied by a considerable amount of bleeding, and the scraps of skin dangling from the horns produce a very unpleasant impression. The process of rubbing the skin off their horns by bucks is connected with their castration. If they are castrated before they start cleaning their horns, these reindeer simply do not "clean themselves" that year, and they shed their horns later.

233 Among the Dolgan every reindeer has a particular designation de-
552 pending on how old it is. A newborn calf is called sah'l tugut, and

233 attained sexual maturity. During the time when they are "in heat" both the sires and the mares do all they can to avoid being harnessed, or allow themselves to be harnessed only for a short distance. When the rutting period passes, the horns of the males who were "in heat" fall off, and they begin quickly to get fat again.

The gestation period of the mares lasts eight months; calving begins at the end of April and continues until the appearance of the gnats. For this period each owner divides his herd into two parts: one part consists of bucks, and the other of mares. This is done because the bucks run much faster than the cows with calf and may exhaust the latter, and especially the calves which have just been born and are still weak. Along with the bucks are sent the reindeer dogs, which may tear the calves to pieces. The herd is reunited at the end of approximately one month, when the calves have already
[343] grown up and are able to follow after the bucks. If the reindeer are in the tundra at the time of calving, the herd of mares is driven to the woods, where they pick out places which are sheltered from the wind; in order to prevent the calves from being frozen, sheds--called daldaakaan--are sometimes built; these are in the shape of a semicircular shed made out of poles which are erected upright and covered on the leeward side with old pieces of "nyuk."[1](1)

1. A nyuk is a chamois-leather covering of a choom.

[204] Cold and late springs have a destructive effect on the reindeer litters; sometimes all the calves perish from the cold.

A calf requires close looking after only for the first two or three days--after this time he willingly follows his mother. There are cases where some mares calve in the autumn. In these cases their litter is doomed to death for sure, since the calves do not have time to get properly strong and they freeze to death, being unable to survive the severe cold. The mare which calves late is called orootii. Many of the offspring die as a result of physiological abnormalities; so, often the offspring is retained in the mother's womb, "tangled up in the guts," as the Dolgan put it; there also occur miscarriages, which are had for the most part by emaciated mares. In her whole lifetime a mare will bring forth up to twelve calves.

232 Reindeer are subject to many ailments. The most destructive are
233 anthrax--ulakan ɵlyy--and hoof cancer. In order to prevent anthrax the natives fumigate the reindeer with a bumblebee nest, with "amber" (fossilized resin), with juniper, or with a splinter of wood from a tree

232 which has been shattered by lightening. In cases of hoof cancer
233 the reindeer sometimes begin to limp even before the appearance of the ulcers, and the latter appear only after some time has passed, and start to secrete pus. Hoof cancer is considered incurable and contagious. For this reason the natives avoid in their summer nomadic wanderings the places where many reindeer fell as a result of this disease.

The pulmonary (purulent) disease taba t'ɔata iriŋe buolara is also considered incurable, and no medicinal means are employed against it. Reindeer have the following stomach ailments:

"Peeŋee"--the reindeer vomits the contents of his stomach; it is considered incurable and results in death.

"As barbat" (the food does not pass)--constipation; it is cured by giving the reindeer melted burbot livers in their drinking water.

"s'ptar' jar"--indigestion of the stomach; they cure the reindeer by tracing with red ocher one line along the backbone, two along the sides, and two along the lower edges of the belly, or tracing one line along the backbone, and two along the sides and connecting them with crosslines:

In some places they burn through the hair with hot birchbark. Unfortunately, the meaning of the first method of treating the disease has been forgotten, and at the present time no explanation has been found.

"Taala katar"--"the spleen dries out"--the reindeer gets thinner and thinner until he falls down; they cure it by piercing the spleen with a needle in seven places, in order to produce swelling by causing the blood to rush in.

"Moojno katar"--"the neck dries out"--in this sickness the reindeer does not hold his head up; they cure it by cauterizing the neck with tinder. To do this they take a small piece of tinder, lay it on the neck of the animal and light it. This cure is founded on the belief that fire draws out disease.

"Taba mejiite ergijer"--"the head spins"--they cure this by shooting a gun which has been loaded with powder alone, singeing the hair of the animal.

In cases where the eye is diseased, the natives pour on it a pinch of snuff, or put seven live lice into the eye of the reindeer.

"Caataam"--a disease of the joints; watery swellings form on the cartilages of the knees; they cure this disease by making an elderly widow bite the sore joints, who says as she does this: "Let

232 the swelling fall off of you like the teeth in my mouth" (Ehigi
233 ispikkit min tiihim kurduk tystyn!).

"Tataar buolar"--the itch, mange; they cure this by smearing the ulcers with resin, or by washing them thoroughly with a decoction of alder bark.

In cases where reindeer break their bones the natives give them water containing copper filings, and then place their hands first on the mouth of the reindeer and then on the place where the break is, thinking that the copper will go there and act as a binding agent, like solder.

136 It must be mentioned that almost all the illnesses of the reindeer
232 occur in the summer. Not a few of the diseases are brought to the
233 reindeer by the mosquitoes and the gadflies, which are [205] a real scourge. The mosquitoes in the lower parts of the tundra surround the reindeer in clouds and suck their blood; they exhaust the reindeer and even worry them to death.

The reindeer gadflies--irgekte--are of two types; those which hang around the reindeer's hide in general and those which hang around the noses of the reindeer. The gadflies of the former type (Oedemagena taranti) appear in July, prick a little hole under the skin of the reindeer, and lay their eggs there. Larvae develop from these eggs, and they live under the reindeer's skin until May of the following year, at which time they drop out onto the moss and turn into gadflies. The hide of a reindeer which has been pierced by a gadfly in this fashion is usually covered with many swellings in the form of small lumps about as big as a nut, and the whole hide looks like a sieve and is no good for clothing. In the spring the Dolgan squeeze the larvae out of the lumps on those reindeer which have been hard hit by the gadflies, but it goes without saying that where there is a large number of reindeer so affected this method of treatment is not very useful. At the time when the larvae are coming out some of the reindeer are completely covered with sores and die from them. The gadflies of the latter type (Cephe homgiatropme) lay their eggs in the nasal cavities of the reindeer; from here the larvae penetrate into the throat of the reindeer, where they pass the winter; in the spring great numbers of them are thrown out when the reindeer coughs, which he does as a result of the irritation in his throat. The only effective method of dealing with the mosquitoes and the gadflies is to move the herds to a colder, more northerly region, where the climatic conditions prevent the insects from living.

The personal property of the collective-farm members includes herds of reindeer (up to 100 head), transport equipment, vertical nets, hunting guns and hunting and fishing tackle. Reindeer-herding remains the chief branch of the economy, but is now done in accordance with good animal husbandry practice. A reindeer technician and a veterinary assistant are attached to each team, which looks after a subherd.]

The Dolgan reindeer-herders on the collective farms pasture the herds in good grazing ground, far from the herding tent by day, and as night falls drive them back to the tent. Having rested, the reindeer at midnight begin to feed near the tent; at dawn they are driven to new feeding grounds some distance away. This grazing system, on the one hand, keeps the reindeer well fed and, on the other hand, they do not stray during the night and are easy to watch. Twenty-four-hour-a-day, year-round guarding of the reindeer has become a rule in collective herding.

[The herd of reindeer is constantly growing. Thus, in the Avamskiy Rayon, the number of reindeer increased over the last five-year period, by more than 50%. The necessity of yearly migrations along the tundra from Dudinka to the Anabar has been eliminated; previously this had a most unfavorable effect on Dolgan reindeer-herding. The demand for pack-reindeer has been reduced, due to the carriage of goods into the Avamskiy and Khatangskiy Rayons by the Northern Sea Route; from here they are brought to remote inland points by steamboat or cutter. Previously, the only route connecting the Dudinka with the Avamskiy and Khatangskiy Rayons in the winter was the reindeer highway from Dudinka to Popigay. Connections are now maintained winter and summer by airplane, although reindeer transport is still of some importance. Its technology is unchanged.

[Hunting technology has been reconstructed. Traps are set in the autumn before the beginning of the blizzards. For this purpose, hunting brigades sometimes journey to the north for several hundred kilometers into the taiga, spending the nights in sled-tents with iron stoves. Hunting brigades are made up before the beginning of the season, traps being distributed on the basis of 150–200 pitfall traps and 10 springtraps per hunter. With the first snow the brigades go out into the tundra and begin to hunt wild reindeer. Foxtraps are baited with the surplus meat obtained. In the Khatangskiy Rayon alone, where the majority of the hunters are Dolgans, the collective farms during the 1948–49 season set 5000 new pitfall traps and prepared 1000 bait-pits for foxes, in which they placed more than 40 tons of bait.

[Fox-hunting begins on November 15th. Springtraps are placed by experienced hunters at places where wild reindeer have been killed in the autumn, or on the bloody tracks of wounded wild reindeer near bait-pits, or previously discovered burrows. Hunting is the main source of income for Dolgan collective farms. The previous predatory methods have gone out of use—spearings, stockades, geese nets. Fishing has become important in a number of areas. Vegetable-gardening and animal husbandry (other than reindeer) have developed on many Dolgan collective farms. The members grow chiefly radishes, cabbage and onions.

[A process of settling down the previously nomadic population is in progress. In the new settlements where the collective-farm members whose work does not make them nomadic live, dwelling-houses of the Russian type have been built, along with various other farm and public buildings. Many settlements have their own electric stations.]

The members of reindeer-herding and hunting brigades lead a nomadic life. Their families frequently travel with them. Separate nomadic groups are now set up, not on the basis of individual relations among different